

[1898]

ALTERNATION OF STATES

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miles in search of it, and acute enough to follow trails and indications. Naturally the meager water supply serves as a mechanism for sorting out and preserving the strong and the acute, and for eliminating the weakly and the dull; and hence the tribe have developed a faculty, or perhaps a potentiality, of distinctive sort—the potentiality of providing against thirst-death by a reserve power in the organism itself rather than in the form of mechanical devices such as characterize higher culture. Quite similar are the relations to the resource of second importance, i. e., ordinary food. Habituated to dispensing with storage and transportation of their primary resource, and accustomed to finding food whenever forced to sufficiently active effort to obtain it, the Seri have never grasped that first principle of thrift expressed in the accumulation of food supplies; and accordingly they intuitively rely on successful fishing or chase or search of vegetal edibles for sustenance, and habitually delay effort until they are stirred into activity by the pangs of hunger. Naturally this improvidence serves as another mechanism for perpetuating families of stored vitality, and especially those able to prevail over swift or strong or cunning quarry by sustained vigor and alertness after prolonged deprivation; and the effect of this mechanism, too, is to develop a reserve power in the organism itself, in lieu of the material reserve made through thrift in higher culture. Similar in their consequences are the relations of the individual organisms to the third industry of Seriland, i. e., navigation of the gale-swept and tide-troubled waters. Even the buoyant balsa can not weather the williwaws or ride the tiderips of El Indernillo without exercise of the utmost strength and skill on the part of the navigators; while the often persistent storms may delay for days embarkation on voyages in quest of fresh water or food. Naturally, the frequent delays and not infrequent perils of such navigation constitute a mechanism for selecting navigators possessed of reserve powers adequate to meet desperate emergencies with vigor and judgment even after enervating waits for wind and tide, while those not so well endowed are either brought up to standard in their hard training school or expelled from their class by drowning or dashing on the rocks, as may happen; so that the effect of this mechanism also is to preserve individuals and perpetuate generations characterized by reserve power, and hence to develop latent potentiality in the tribe. Now, the normal product of these and other natural mechanisms immediately reflecting environmental conditions is capacity for spurts, or for intense functioning under severe stress, despite accentuation of the stress by thirst or hunger or exhaustion, or by all combined—i. e., the effect of habit and habit is to produce precisely such a somatic regimen as that so conspicuously displayed by the Seri folk. So the intensified activity with long intervals of inactivity, simulating the habits of carnivorous and some other lower animals, and hence suggesting primitive condition, would appear to be largely a phylogenetically acquired character expressing specific adjustment to environment.

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- 225 the turtle is either drowned or driven ashore, or else lifted on the craft.¹
Immediately on landing the quarry, the plastron is broken loose by
264 blows of the hup² and torn off by vigorous wrenches of the warriors
and their strong-faloned spouses in the impetuous fury of a fierce
blood-craze like that of carnivorous beasts; the blood and entrails and
all soft parts are at once devoured, and the firmer flesh follows at a
rate depending on the antecedent hunger, both men and women
crushing integument and tendon and bone with the hup, tearing other
tissues with teeth and nails, mouthng shreds from the shells, and
gorging the whole ravenously if well abridged, but stopping to
sing and smoke or even half roast the larger pieces if nearer satiety.
[25] If the quarry is too large for immediate consumption and not too far
from a rancheria the remnants (including head and flippers and shells)
are hoisted to the top of the jacal immediately over the open end—the
conventional Seri larder—to soften in the sun for hours or days; and
on these tough and gamey tidbits the home-stayers, especially the
youths, chew luxuriously whenever other occupations fall. In times of
plenty, such sun-ripened fragments of reeking feasts are rather gener-
ally appropriated first to the children and afterward to the coyote-
dogs; and it is a favorite pastime of the toddlers to gather about an
inverted carapace on hands and knees, crowding their heads into its
noisome depths, displacing the rare scavenger beetles and blowflies of
this arid province, mumbling at the cartilaginous processes, and
sucking and swallowing again and again the tendinous strings from
the muscular attachments, until, overcome by fulness and rank efflu-
via, they fall asleep with their heads in the trough—to be stealthily
nudged aside by the cringing eurs attached to the rancheria. Com-

[114] ¹ A lively and capital account of Seri turtle-fishing appears in Hardy's *Travels in the Interior of Mexico*, 1828, pp. 288-289. "Dreja's bay is of considerable extent, and there are from five to three
501 fathoms water close to Arnold's Island, in the neighborhood of which the Indians catch abundances of
411 turtle in a singular manner. I have already described their canoe, which in Spanish are called
'balsa'. An Indian pushes himself from the shore on one of these by means of a long, elastic pole of
about 12 or 14 feet in length, the wood of which is the root of a *Chorizanthe*, growing near
the coast; and although the buoyancy of this tree are extremely brittle, the underground roots are
so pliable as when-bent and rarely or dark in color. At one end of this pole there is a hole an inch
deep, into which is inserted another bit of wood, in shape like an arrow, having a square bit of iron
a inches long fastened to it, the other end of the iron being pointed. Both the hole and cup are
first moistened and then tightly inserted one within the other. Fastened to the iron is a cord of very
considerable length, which is brought up along the pole, and both are held in the left hand of the
Indian. As securely is the sail thus fixed in the pole that although the latter is used as a pulley it
does not fall out.

225 ² A turtle is a very lethargic animal, and may frequently be surprised in its watery slumbers. The
bait is placed nearly perpendicularly over one of these unawakened sleepers, when the fisherman,
suddenly sliding the pole through the water in the direction of the animal till within a foot or two of it,
he suddenly plunges the iron into its back. No sooner does the creature feel itself incased than it
swims hastily forward and endeavors to liberate itself. The slightest motion of the turtle displaces
the iron point from the bung pole, which would otherwise be inevitably broken and the turtle would
as certainly be lost; but in the manner here described it is held by the cord fastened on to the iron
which has penetrated its back till, after it has sufficiently exhausted its strength, it is hauled on
board the canoe by the fisherman, who proceeds to the shore in order to dispose of his prize.

[42] ³ The universal stone implement of the Seri, improvised from a cobblestone and used in nearly
every industrial occupation (see page 6, p. 25), the designation in náhuatl, or mesquitopatl, from the
sound of the stroke, particularly on animal tissue.

[2000]

LIGHTNESS OF THE BASKETRY

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extreme lightness in proportion to capacity, a quality due to the spongy character of the torote coil and to the thinness of the splints used in the woof. The inside dimensions, weight, and dry-measure capacity (filled to the level of the brim with rice) of two typical specimens approaching extremes in size are indicated in the accompanying table. As noted elsewhere, the ware is absolutely without decorative devices in weave, paint, or form; it is baldly utilitarian, a model of economy in material and in the balance between structure and function, approaching in this respect the thin-walled cañero olla, the graceful balma, and the light but effective harpoon. The structural correspondence of the ware to a widespread type and its limited use among the tribe suggest an accultural origin for the Seri basketry; but the delicate adjustment of means to ends in the manufacture and the strictly local character of the material quite as strongly suggest an indigenous development.

Measure No.	Diameter	Depth	Weight	Capacity
174328 ...	28 cm. (11 in.)	9.5 cm. (3 1/2 in.)	402 g. (17 oz.)	6.25 l. (4.6 qt.)
174329 ...	23 cm. (9 in.)	8.9 cm. (3 1/2 in.)	142 g. (5 oz.)	1 l. (1.06 qt.)

It is impossible to portray justly the food habits of the Seri without some reference to a systematic acatophagy, which seems to possess fiducial as well as economic features. In its simplest aspect this custom is connected with the tuna harvest; the fruits are eaten in enormous quantity, and are imperfectly digested, the hard-coated seeds especially passing through the system unchanged; the seeds containing these seeds are preserved with some care, and after the harvest is passed the hoard (desiccated, of course, in the dry climate) is ground between hump and abut, and winnowed in baskets precisely as are the mesquite beans; and the product is then eaten either dry or in the form of atole like the mesquite meal. In superficial view this food factor is the precise homologue of the "second harvest" of the California Indians as described by Clavigero, Baegert,¹ and others; but it gains importance, among

¹An Account of the Aboriginal Inhabitants of the Californian Peninsula, as given by Jacob Baegert, a German Jesuit missionary. . . . Translated and arranged for the Smithsonian Institution by Charles Hays, Ann. Rep. Smithsonian Inst. for 1862, pp. 282-288. Baegert's account of foods (pp. 285-287) is so apposite as to be worthy of quotation nearly entire.

²Notwithstanding the barrenness of the country, a Californian hardly ever dies of hunger, except, perhaps, now and then an individual that falls sick in the wilderness and at a great distance from the colonies, for those who are in good health trouble themselves very little about such patients, even if these should happen to be their husbands, wives, or other relations, and a little child that has lost its mother or both parents is also occasionally in danger of starving to death, because in some instances no one will take charge of it, the father being sometimes indolent enough to abandon his offspring to its fate.

³The food of the Californians, as will be seen, is certainly of a mean quality, yet it keeps them in a healthy condition, and they become strong and grow old in spite of their poor diet. The only period of the year during which the Californians can satisfy their appetite without restraint is the season of the pitahaya, which ripens in the middle of June and abounds for more than eight weeks. The gathering of this fruit may be considered as the harvest of the native inhabitants. They can eat as much of it as they please, and with some this food agrees so well that they become moribund during that period, and for this reason I was sometimes unable to recognize at first slight individuals, otherwise perfectly

222 forests of giant cacti (Fig. 9) provide during this season an unlimited supply of "pitahayas" toward which the tribespeople customarily moved to accomplish the annual harvest. The fruits were readily knocked down by means of long poles and, when ripe, the spines were easily brushed off, leaving a luscious pulp as big as a fig. During the height of the season all the clans withdrew from the coast and gave their undivided attention to the collection and consumption of the cactus fruit, gorging tremendous quantities for weeks until waning supply and cloying appetite drove them back to the more severe hunt for turtle and pelican.

252 Perhaps the only germ of thriftiness in the
262 Seris is shown by a peculiar custom with
514 respect to the pitahayas. The fruits, eaten in such enormous quantity, were imperfectly digested, the hard-coated seeds particularly passing through the body unchanged. Using large seashells, the feces containing these seeds were collected and preserved with some care. Thus, when the harvest of fresh fruits was over, there remained a hoard of these dry, nutritious discharges which were ground on the stone abut, winnowed in a shallow basket and made into a meal to be eaten, either dry, as a watery atole, or mixed with turtle grease to form a thick paste.

614 Although the Seri's omnipresent problems of food-getting and of personal subsistence have been of particular interest, the lost social customs of the tribe deserve a moment's attention. Before the death of all but a few of the 2,000-3,000 Seris at the hands of invading Spaniard and Mexican, the tribe consisted of a number of conspicuous maternal clans, each of which was presided over by a zoic tutelary such as the Pelican, the Turtle, the Rattlesnake, or the Badger. The totemic symbols denoting the various beast-gods and incidentally indicating the blood-carriers of clans dedicated to them, consisted of elaborate designs painted upon the face (Fig. 10). In accord with their savagery in which the social organization was based on blood kinship reckoned in the female line, under ordinary circumstances, the faces only of the females were painted. Colored minerals pounded to powder afforded the pigments for the paint.

[p. 201 (A)]

Coyote figures out probably

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[773] as an important and perhaps disreputable figure in the mythology although nothing but scraps and bits of information suggest this. It is possible that there is actually a taboo on eating this animal or perhaps it is so disreputable that eating its flesh would put a gourmet in an inferior position.

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[221] How important is the Seri mammalian diet is hard to tell. It certainly looms more heavily during the winter, because in the cool season hunting is easier than during the heat of the summer and in fact this is when most of it is done by the ardent hunters. Too, winter subjects the Seris to greater hazards and is apt to increase their dependence on the desert resources over that during the summer, even if these resources are scantier at that time.

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[224] To all of these animals one should add the semi-wild burros running about the extensive Mexican rancherias. The Indians poach on them frequently using their fire arms, usually the .22 caliber rifles. In any case, it appears that during the summer when the field work was carried out, the mammalian diet figures quite lightly on the Seri table.

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[263] *Food preparation:* Very little is done in the preparation of the mammalian meat. All that I could observe was the boiling of it in hot water spiced with salt. The Indians were saying that in order to have the meat of a peccary, deer or bighorn ready to eat one must boil it 2-3 hours. The same procedure is followed with the meat of the burros. In contrast to this, as shall be seen later, fish are boiled as well as roasted while the turtles are also dried and salted. Preparation of meat is done by women, certainly at least in the encampments when they are present.

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[462] *Food preferences:* Some of the Seri food preferences have already been mentioned. At the top of the list as the desirables are the peccary, the deer, the bighorn and the blacktail jackrabbit; at the bottom is the badger, whose meat "is not much good." There is also preference by sex. Females of both the bighorn and peccary are preferred over the males "because they do not have the bad odor like the males." This sort of favoritism also occurs among the Mexicans. However, the Indians did not elaborate beyond this point.

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[291] *Other economic uses:* Apart from meat, hides are also used. The hides of the deer, bighorn and peccary had been used for sleeping mats although this matter has been expressed in the past tense. Miguel Barnett also suggested that the bighorn hides had been used for clothing by the Indians in the past—but he neglected to say how long ago. During Kroeber's stays, no Seris went about in the animal or bird (pelican) skins but earlier when McGee visited them they went about in these simple garments. Judging then by Miguel's memory, the use of the bighorn hide for clothing must be pushed back to the period of World War I or even earlier.

Miguel Barnett indicated that the "fur" of the bighorn had once been worn for the cold season "but not now."

[P 10 A]

262 them to their shelter and held them there for several days before they and their families finally ate them up. The turtles are also a well-liked item.

As already indicated in some instances there exists preference for a particular part of an animal. Of the Gila monster only the fat tail was said to have been eaten, and of both rattlers, the head and the tail are discarded on the grounds that they contain toxin. Finally the toad and the gecko and *Xanthusia* are all rejected as completely venomous.

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262 It is also evident that changes in the Seri taste have occurred in the course of the past several decades. Some animals are on their way out as food, and here we have the Gila monster, the whipcoach, the red racer and smaller lizards. In several cases, and this includes the Gila monster, the responses indicated that the animal had been eaten in the past. I also observed that on the sly, the Seris would eat them when other food was in short order. But they are reluctant to admit this and often altogether denied it.

Hunting

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[225] Most reptiles are captured by hand or else killed with a stick, stone or pea-shooter. Except for the turtles, the Seris will not make special expeditions. But it is certain that if they find themselves on any of the islands near the shores of Baja California they will go ashore deliberately in search of the chuckawalla.

225 The turtles are another matter. Here now, just as in the past, special expeditions are made in order to get them. These expeditions take place nowadays in the usual flat-bottomed plank boats, either motor or oar propelled. The hunt takes place only during unusually quiet and dark nights, when the Gulf is smooth and calm and there is neither wind nor ripple. With the slightest disturbance, turtle fishing is impossible. It is all done with the torch lights or Coleman lanterns. The principal and only weapon is the harpoon, identical with that described and illustrated by McGee. The turtles are then harpooned, dragged into the boat and either left alive, when the hunters have a sale of live ones in mind, or pounded to death with a club or oar, quartered and then either consumed on the spot or else dried and salted.¹⁰

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[462] While the collecting of the smaller animals usually falls to the children or women, turtle hunting is men's job. Men, too, usually get the chuckawalla because they usually visit more distant islands.

Pets

231 None of the reptiles are pets in a real sense. Those few that might be kept are only held until the day when they are butchered and eaten. It is motivated more by the wish to preserve fresh food than by any affection for the animal. The turtles, the tortoises and the chuckawalla belong here. Occasionally a Seri boy will string a lizard, a Seri-

¹⁰The largerhead is hunted in the daytime because, owing to its great strength, night hunt would be too dangerous. Two harpoons are always used on it, while for the smaller species, one harpoon usually suffices.

226 Occasionally they'll stay a little longer and when far off in the Gulf, they will return only in the afternoon. But this is not frequent. Some of the bait catching is done during the night by the light of torches or Colemans.

As already mentioned, unfavorable weather may put off fishing for several days and when that happens, famine becomes a real menace to the Indians because they have no supply of food stored away for the lean day and no cash for such purposes.

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Sexing

* 825 Sex differences in fishes have been observed by the Seri probably in the majority of the species from the list, although for several there is no data available. The tabulation breaks down by the number of species as follows:

	number of species
Sex differences observed	22
Sexes alike in all respects	6
Didn't know what differences there are	6
No data	8

The six species in which sexes are considered indistinguishable in size and color and in other respects are *Pescara*, *Pinta*, *Baya*, *Pinturera*, *Smyrna* and the undertermined shark *sp. C*. The inclusion here of the most important economic species such as *Pinta* and *Pescara* and of the sharks is interesting. It shows, in the main, probable lack of information rather than ignorance of differences on the part of the Indians. It was probably an oversight in questioning, for surely the sharks' sexual differences are usually known to them and it is improbable that they could never tell the difference between the sexes of their most important marine game.

The species in which they expressed puzzlement over the differences and simply indicated that they didn't know the answer were largely little known forms about which they could tell very little anyway, either because they occurred far away from their territory like, for example, the flying fish and the tuna, or otherwise were obscure species, too small to pay attention to, or finally, the huge monsters, too big for them to hunt and approach for more careful inspection.

In more detail, a number of different sexing criteria seem to be employed by the Indians. These differences are tabulated below:

Males larger	Females wider, larger in bulk, but length the same
<i>Abudefduf saxatilis</i>	<i>Cydoncion macdonaldi</i>
<i>Gymnothorax castraneus</i>	<i>Trachinotus paucispinis</i>
<i>Girella amplipennis</i>	<i>Cynoscion parvipinnis</i>
<i>Anisostrenus davidsoni</i>	<i>Megil sp.</i>
<i>Gillichthys seta</i>	<i>Bairdiella chrysotis</i>
<i>Sphaeroides annulatus</i>	Males more brightly colored
<i>Paracanna viola</i>	<i>Paralabrax maculatiscapus</i>
Females larger	<i>Hypoblenius gentilis</i>
<i>Epinophalus analogus</i>	

Other sex differences considered by the Seri are structural and apply to the sharks. They associate the presence of the "2 penises" in the sharks and mantas with the males and their absence with the females. The "penises" are, of course, sex claspers present near the vent in the male sharks which aid them in holding up the female during the mating. These differences had been observed

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123 the flesh attached. This we roasted, or broiled, by standing it on
262 edge against two stakes in front of the fire. The breast was white
and tender, somewhat like roast pig, but much more delicious.

242 The Seris cut off the great flippers, dug out the entrails, and
252 whenever there was a crack in the crowd of men, women and children,
there was a dog lapping the blood and chewing a shred of meat before
being driven off. Men, women and children tore off pieces of the tender
meat and ate it raw. The blood which gathered in the hollow of the
• [251] shell was baled out and saved in an olla.

A woman took out the coils of entrails, ripped them open with her
finger, squeezed out the half-digested sea grass, which resembled
closely-packed boiled greens, and rinsed them in the sea. The head
[251] was skillfully disjointed, and with flippers, entrails and liver, put
up on the brush roof away from the sand and dogs.

Then began the feast; half the turtle being devoured immediately.
[264] To see Blanco, which name fits neither his complexion or character,
gnaw the bone and tear away the raw flesh of a turtle flipper with
his strong white teeth and cruel mouth, would not require much imagi-
nation to substitute the shin bone of a human being.

All parts of the sea turtle are utilized except the bones and
portions of the head. The white, flexible under-shell is roasted and
eaten, but how they can masticate and digest it is a mystery. I tried
it and gave it up, as did all our party. It might have been a Goodyear
tire, for all the impression we made on it, but even the Seri children
eat it. The carapace is broken into small pieces and dried out in an
237 olla, and this yields a green oil. The shell is nearly one-half inch
thick and filled with minute cells which carry oil. This oil is evi-
dently a provision of nature to prevent barnacles and marine growths
from attaching to the shell. This oil is poured into a previously
cleaned section of intestine, fastened at one end, and then is bottled,
ready for transportation or use.

The skin of the flippers is used for sandals. The broken pieces of
carapace are also used for firing ollas. The shells are used for wind-
breaks, for receptacles for transporting household things on women's
heads, and possibly for other needs. The stomachs are stretched, prob-
ably with sand, and when dried are used for transporting water, the
same as we use a canteen.

185 The Seris are always improvident. They raise no cattle. They plant
261 nothing and the only crops they raise are children and dogs. They
store no food away, eat when there is plenty, go hungry when there is
[231] nothing to eat. When they will eat raw turtle meat like animals, their
[231] taste is not refined. This is evidenced when they will eat a horse or
[262] burro dead, several days---scrape off the maggots to get a chance
at it.